

List of Ingredients

| INGREDIENT (INCI NAME) | FUNCTION | CAS# |
|--|--------------------|------------|
| Purified Water (Aqua) | Solvent | 7732-18-5 |
| <p>Purified water or deionized water is water that lacks ions, such as cations from sodium, calcium, iron, copper and anions such as chloride and bromide. This means it has been purified from all other ions except H₃O⁺ and OH⁻. Deionized water is similar to distilled water, in that it is useful for skin care where the presence of impurities may be undesirable.</p> | | |
| Dimethicone | Film Forming Agent | 9006-65-9 |
| <p>Dimethicones stay on or near the surface of the skin. Not only are the molecules too big to physically enter past the upper living cells - they associate with the upper layer of drying skin - but they also cannot penetrate cell membranes due to their large size. They evaporate quickly after helping to carry oils into the top layer of epidermis. From there, they may be absorbed by the skin.</p> <p>Dimethicones form a barrier layer on the skin which must be renewed as the skin sloughs off. Dimethicones form a protective layer which helps prevent transdermal water loss - a very useful characteristic for many products. Silicone gums provide instant shine to hair. Dimethicones act to help seal moisture into the outer layer of skin, which helps prevent many kinds of damage.</p> | | |
| Stearic Acid | Emulsifier | 822-16-2 |
| <p>Stearic acid is one of the useful types of saturated fatty acids that comes from many vegetable fats and oils. It is a waxy solid. The term stearate is applied to the salts and esters of stearic acid. Stearic acid is a saturated fat that's in some plant foods like chocolate. It's very stable in storage. A relatively large percentage of stearic acid consumed is converted to oleic acid (a monounsaturated fat).</p> <p>Stearic acid is used to form margarines, shortenings, spreads, and as a cream base for baked products. Even though stearic acid is a saturated fat, studies have suggested that it has little effect on blood cholesterol levels, because such a high proportion is converted to oleic acid.</p> | | |
| Glycerin | Humectant | 56-81-5 |
| <p>Glycerin is a humectant, meaning it attracts moisture to your skin. Glycerin is a neutral, sweet-tasting, colorless, thick liquid which freezes to a gummy paste and which has a high boiling point. Glycerin can be dissolved into water or alcohol, but not oils. On the other hand, many things will dissolve into glycerin easier than they do into water or alcohol. Glycerin is also highly "hygroscopic" which means that it absorbs water from the air.</p> <p>Example: if you left a bottle of pure glycerin exposed to air in your kitchen, it would take moisture from the air and eventually, it would become 80 per glycerin and 20 percent water.</p> <p>(Note: While people say this softening is the result of the glycerin attracting moisture to your skin, there is heated debate as to whether or not the glycerin has some other properties all its own which are helpful to the skin. Summed up, the current thinking is "We know glycerin softens the skin. Some people think its because it attracts moisture, but there could be other reasons.")</p> | | |
| Cetyl Alcohol | Co-emulsifier | 36653-82-4 |
| <p>An emollient and secondary emulsifier, cetyl alcohol is derived from naturally occurring fatty acids from coconut oil. It is a secondary emulsifier that thickens or adds body to lotions. Not to be confused with drying, ethyl alcohols. Cetyl and stearyl alcohols together create a cetearyl alcohol that forms an occlusive film to keep skin moisture from evaporating and gives skin a velvety feeling.</p> | | |
| Isopropyl Myristate | Emollient | 110-27-0 |
| <p>Isopropyl myristate is used as an emollient and lubricant in preshaves, aftershaves, shampoos, bath oils, antiperspirants, deodorants, and various creams and lotions. It is an emollient and lubricant that reduces the greasy feel of products by replacing other, oilier ingredients. The ester of isopropyl alcohol and myristic acid. It spreads very easily and promotes a dry feeling, which is often used to reduce a greasy feel caused by the high oil content of other ingredients.</p> | | |
| Stearyl Alcohol | pH adjuster | 102-71-6 |
| <p>Triethanolamine, often abbreviated as TEA, is an organic chemical compound which is both a tertiary amine and a tri-alcohol. A tri-alcohol is a molecule with three hydroxyl groups. Like other amines, triethanolamine acts as a weak base due to the lone pair of electrons on the nitrogen atom.</p> <p>This ingredient is used as a pH balancer in cosmetic preparations in a variety of different products - ranging from skin lotion, eye gels, moisturizers, shampoos, shaving foams etc.</p> | | |
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| Xanthan Gum | Stabilizer | 11138-66-2 |
| <p>Despite its rather alien-sounding name, xanthan gum is as natural as any other fermented corn sugar polysaccharide (corn syrup) you can name. The United States Department of Agriculture ran a number of experiments involving bacteria and various sugars to develop a new thickening agent similar to corn starch or guar gum. When <i>Xanthomonas campestris</i> was combined with corn sugar, the result was a colorless viscous liquid called xanthan gum. Xanthan gum is used in dairy products and salad dressings as a thickening agent and stabilizer. Xanthan gum prevents ice crystals from forming in ice creams, and also provides a 'fat feel' in low or no-fat dairy products.</p> <p>Another use for xanthan gum is the stabilization and binding of cosmetic products. One advantage of xanthan gum is that a little goes an incredibly long way. Cosmetic manufacturers add a very small amount of xanthan gum to their cream-based products in order to keep the individual ingredients from separating. Xanthan gum is also used as a substitute for wheat gluten in gluten-free breads, pastas and other flour-based food products. Those who suffer from gluten allergies should look for xanthan gum as an ingredient on the label.</p> | | |

Hypromellose (Hydroxypropyl Methylcellulose)

Film Former

9004-65-3

Hypromellose solutions were patented as a semisynthetic substitute for tear-film. Its molecular structure is predicated upon a base celluloid compound that is highly water soluble. Post-application, celluloid attributes of good water solubility reportedly aids in visual clarity. When applied, a hypromellose solution acts to swell and absorb water, thereby expanding the thickness of the tear-film.

Hypromellose augmentation therefore results in extended lubricant time presence on the cornea, which theoretically results in decreased eye irritation, especially in dry climates, home, or work environments. On a molecular level, this polymer contains beta-linked D-glucose units that remain metabolically intact for days to weeks. On a manufacturing note, since hypromellose is a vegetarian substitute for gelatin, it is slightly more expensive to produce due to semisynthetic manufacturing processes.

Aside from its widespread commercial and retail availability over the counter in a variety of products, Hypromellose 2% solution has been documented to be used during surgery to aid in corneal protection and during orbital surgery.

VP/Eicosene Copolymer

Film Former

28211-18-9, 77035-98-4

VP/Eicosene Copolymer is a polymer of vinylpyrrolidone and eicosene monomers. It has reported used in the following product types: sunscreen spf 15 and above (106); mascara (24); facial moisturizer/treatment (14); anti-aging (12); lip gloss (12); other products with spf (8); brow liner (6); baby sunscreen (5); moisturizer (5); sunscreen below spf 15 (5).

Stearth-21

Emulsifier

9005-00-9

Stearth 21 (or fill in the number) the number indicates the degree of liquidity from 4 (thin) to 100 (solid). It is an emulsifier- substance that keeps two or more components of a product from separating. This mixture is called an emulsion.

Phenoxyethanol

Preservative

122-99-6

Phenoxyethanol is an organic chemical compound, a glycol ether often used in dermatological products such as skin creams. It is a colorless oily liquid. It is a bactericide (usually used in conjunction with quaternary ammonium compounds), often used in place of sodium azide in biological buffers as 2-phenoxyethanol is less toxic and non-reactive with copper and lead.

It is also used as a fixative for perfumes, an insect repellent, a topical antiseptic, some dyes, inks, pharmaceuticals, and in organic synthesis. It is moderately soluble in water. It is also listed as an ingredient for many United States vaccines per the Center for Disease Control.